

Notes on Amphibians and Reptiles from the Central United States

John C. Marr

From March through October, 1942, herpetological collections were made along the 100th parallel and west to the 103rd, from the International Boundary in Texas, through Oklahoma and Kansas, into Nebraska. A few specimens were taken in New Mexico, Colorado, and South Dakota. In addition to the 499 specimens collected by the writer, John W. Anderson collected 21; John Davis, 6; Earl S. Herald, 267; Stanley G. Jewett Jr., 32; and Charles G. Sibley, 27; making a total of 852 specimens. Thanks are due all of these for the permission to include their material in this report, as well as for the privilege of examining their field notes. All specimens have been catalogued and complete data may be found in the Natural History Museum, Stanford University.

Herpetological collecting was incidental to other work and time available for this purpose, as well as for recording field observations, was limited. For this reason many of the amphibians and nocturnal reptiles present in the area covered were not secured. In spite of the opportunistic nature of the collecting, several little known species and interesting records were obtained, especially in Texas. With few exceptions, all amphibians and reptiles encountered were collected. Large or abundant species, such as *Terrapene ornata*, *Pituophis s. sayi*, and *Coluber flagellum testaceus*, were collected selectively. All extremely small *Terrapene* were preserved and at least one specimen was taken from each general locality visited. All specimens of all three species were saved when taken near the limits of their ranges.

Under each species, in the following account, the states in which they were taken, with the number taken, are listed from south to north. Counties are listed alphabetically under the states and each is followed by the number taken in that county and date, or dates. All specimens were collected in 1942. Specific localities within counties and SNHM catalogue numbers have been included only for range extensions or for rare forms. An attempt has been made to (1) include as much natural history data as possible; (2) to provide additional descriptive material on rare species, when warranted by the variation of these specimens from previous descriptions; (3) to provide data for the definition of ranges and to point out range extensions (no attempt has been made to mention new county records, although most of the distributional papers on this region by Burt, Ortenburger, Smith, Strecker, Taylor, etc., have been referred to); and (4) to make available lists of series taken, which other workers may wish to examine. All data are from the writer's field notes unless otherwise stated. Collector's names have been included only with those specimens for which complete data and catalogue numbers are given and only if not collected by the writer.

In general, the nomenclature of Stejneger and Barbour's (1943) checklist has been followed. However, important works prior to that date have been consulted.

Unless otherwise indicated all measurements are from formalin-fixed, alcohol-preserved material and were made with dividers to the nearest whole millimeter. Snakes were measured directly on a millimeter rule. Anatomical distances as herein used may be defined as follows: The body length of toads is the distance from the tip of the snout to the most posterior part of the body. The body length of lizards is the distance from the tip of the snout to the anus. The total length of snakes is the distance from the tip of the snout to the end of the tail, and the tail length is the distance from the anus to the end of the tail. The length of turtles is the median length of the carapace and the width of the carapace is taken at the posterior edge of the sixth marginal shields. Egg measurements are the least and greatest diameters.

Ambystomidae

Ambystoma tigrinum mavortium Baird

TEXAS: One; Motley, 1, Oct. 17.

KANSAS: One hundred fourteen; Grant, 1, Aug. 25; Hamilton, 111, June 1; Wallace, 2, June 19.

The specimen from Matador, Motley Co., Texas, was taken at night, after several days of heavy rains, from a puddle in the gutter. One hundred eleven larval salamanders from Hamilton Co., Kans., (Herald) were seined from mud pools adjacent to the Arkansas River near Syracuse. Mud turtles (*Kinosternon flavescens*) cyprinids, and cyprinodonts were all taken from the same pools.

Scaphiopodidae

Scaphiopus bombifrons Cope

KANSAS: Four; Hamilton, 1, May 29; Lane, 2, Aug. 26; Thomas, 1, Aug. 11.

NEBRASKA: Three; Deuel, 1, July 20; Lincoln, 1, July 22; Red Willow, 1, July 2.

The five specimens from Hamilton and Lane Co's., Kansas, and Lincoln and Red Willow Co's., Nebr., were all taken in mouse and rat traps baited with rolled oats. Some had obviously sprung the traps by accidentally disturbing the treadle. Others, judging from their positions in the traps, had been attracted by insects on the bait or by the bait itself. All were taken in fairly dry areas; some near freshly plowed fields.

*Bufo*nidae

Bufo cognatus Say

KANSAS: Fourteen; Finney, 1, June 1; Ford, 2, May 26, 28; Meade, 1, May 19; Norton, 4, June 19; Seward, 1, May 20; Thomas, 3, June 8, 9; Trego, 2, Aug. 6, 8.

NEBRASKA: Nine; Deuel, 1, July 20; Hitchcock, 8, July 9.

Two of these toads were taken at night under streetlights in Dodge City, Ford Co., and Wakeeney, Trego Co., Kans.; two were taken in the Arkansas and Cimarron River bottoms; and one was caught in a rat trap in Deuel Co., Nebr. Smith (1934: 442) records this toad from "... North Dakota south on the east through central Kansas..." These western Nebraska localities may constitute an extension of the known range, although Wright and Wright (1942: 76) list it from adjoining states.

Bufo compactilis Wiegmann

TEXAS: Four; Pecos, 3, April 24; Sutton, 1, April 29.

The specimen from Sutton Co. was taken in a moist burrow under a rock.

Bufo woodhousii woodhousii Girard

OKLAHOMA: Forty nine; Beaver, 48, Aug. 30, 31, Sept. 1, 7, 8; Harper, 1, May 16.

KANSAS: Forty-one; Ellis, 3, Aug. 4; Finney, 2, June 1, 2; Graham, 9, June 6, 8, 9, 11, 12, 13, 17; Hamilton, 2, June 1; Ness, 2, Aug. 27; Norton, 5, June 19, 23, 24, July 30, 31; Phillips, 1, June 24; Rush, 1, Aug. 17; Trego, 9, Aug. 8, 13; Wallace, 7, June 9.

NEBRASKA: Eleven; Dawson, 1, July 14; Dundy, 1, July 28; Hitchcock, 2, July 6, 7; Lincoln, 5, July 14, 16; Logan, 2, July 17.

This toad was taken in grassland, sand hills, near creeks, and in towns. They were common under streetlights on hot nights, particularly in Beaver, Beaver Co., Okla., where as many as eight or more were observed under one light. The stomachs of those taken under streetlights were crammed with insect remains, largely beetles. Two were taken in rat traps and one was removed from the burrow of a kangaroo rat (*Dipodomys ordii*). The largest specimen was 99 millimeters in length. Nine young ranging from 16 to 32 millimeters were taken between June 8 and August 13 in Kans. and Nebr.

*Hylidae**Acris crepitans* Baird

TEXAS: Forty-seven; Briscoe, 3, Oct. 9; Sutton, 12, April 16, 22; Tom Green, 12, April 26, 28; Val Verde, 9, March 31, April 2; Wheeler, 11, Sept. 14.

OKLAHOMA: Twenty-five; Beaver, 25, July 5, 6.

KANSAS: Seven; Sheridan, 6, Aug. 10; Trego, 1, Aug. 3.

These frogs were invariably found near ponds and streams and generally on sandy banks. They seemed reluctant to enter the water and would hop along the shore in preference to entering the water. When forced to jump into the water they immediately returned to the shore. After several hops they seemingly tired and were more easily captured.

*Leptodactylidae**Syrrophus marnockii* Cope

TEXAS: One; Sutton, 1, April 23.

This specimen, SNHM 7644, was taken two miles north of Sonora under a large, flat piece of limestone. It had rained the night before and the ground was quite moist.

*Ranidae**Rana catesbeiana* Shaw

TEXAS: Three; Wheeler, 3, Sept. 14, 15.

OKLAHOMA: Four; Beaver, 4, Sept. 5, 6, 11.

KANSAS: Two; Trego, 2, Aug. 3, 12.

NEBRASKA: Two; Lincoln, 2, July 11.

This frog was never observed very far from water. The young seemed quite wary, but the large adults (two taken) were easy to catch.

Rana pipiens Schreber

TEXAS: Sixty-four; Brewster, 4, April 14, 15, 26; Briscoe, 3, Oct. 9; Donley, 4, Sept. 28, Oct. 6; Gray, 6, Sept. 21; Hemphill, 5, Sept. 17, 18; Jeff Davis, 3, May 3; Pecos, 1, April 27; Roberts, 25, Sept. 18, 19; Sutton, 1, April 22; Tom Green, 5, April 26, 28; Val Verde, 3, March 31; Wheeler, 4, Sept. 14.

OKLAHOMA: Five; Beaver, 5, Sept. 5, 6, 11.

KANSAS: Eight; Ellis, 1, Aug. 4; Ford, 2, May 31; Graham, 1, June 12; Hamilton, 1, May 31; Sheridan, 2, Aug. 10; Trego, 1, Aug. 6.

COLORADO: One; Yuma, 1, July 27.

NEBRASKA: Six; Dawson, 1, July 14; Lincoln, 5, July 11, 15, 22.

These frogs were observed only in or near water in the spring, but later in the summer were also noted in grassy places removed from water. In September, in Roberts Co., Texas, they were found to be exceedingly common in a slight depression near a dry watercourse where nineteen were captured in a short time. Five were taken in rat traps baited with rolled oats.

Iguanidae

Crotaphytus collaris collaris (Say)

TEXAS: Nine; Coke, 1, May 1; Pecos, 1, April 21; Sutton, 5, April 14, 16, 17, 20, 24; Tom Green, 2, April 26, 30.

OKLAHOMA: Two; Beaver, 2, Sept. 12.

These lizards were common where rocky ledges and loose rocks were present, even in isolated "islands" of such habitat. They are extremely fast and when alarmed take refuge under loose rocks. They can be easily captured by quickly turning over rocks and making a hasty grab. They readily bite if afforded the opportunity.

Holbrookia lacerata Cope

TEXAS: Three; Howard, 1, May 5; Tom Green, 1, April 30; Val Verde, 1, April 3.

The specimen from Val Verde Co. was taken in a sandy wash.

Holbrookia maculata maculata (Girard)

TEXAS: Two; Howard, 1, May 8; Presidio, 1, April 20.

OKLAHOMA: Three; Beaver, 3, Aug. 31, Sept. 7.

KANSAS: Eight; Finney, 1, June 2; Ford, 1, May 26; Hamilton, 1, June 1; Morton, 2, May 22; Wallace, 3, June 11.

NEBRASKA: Four; Lincoln, 2, July 16; McPherson, 2, July 24.

These were generally taken in sandy places. One, measuring 29 millimeters (body length), was taken from the gut of a *Coluber flagellum testaceus*, Sept. 7, Beaver Co., Okla. One from Presidio Co., Texas, (Jewett) was taken from a roadrunner (*Geococcyx californianus*)

Holbrookia texana (Troschel)

TEXAS: Three; Howard, 1, May 5; Sutton, 2, April 19, 24.

Urosaurus ornatus ornatus (Baird and Girard)

TEXAS: Five; Sutton, 5, April 16, 17, 23.

These lizards were taken on fence posts and rocks.

Urosaurus ornatus schmidti Mittleman

TEXAS: Four; Presidio, 4, April 15, 19.

Collected (Jewett) around buildings and on fence posts.

Uta stansburiana stejnegeri Schmidt

TEXAS: Seven; Briscoe, 1, Oct. 9; Ector, 1, May 5; Hall, 2, Oct. 10; Pecos, 2, April 29; Presidio, 1, April 24.

These were taken in sand hills, on rocky ledges, and in mesquite flats.

Sceloporus merriami merriami (Stejneger)

TEXAS: One; Val Verde, 1, March 31.

This specimen was taken from a crevice in the limestone bluffs near the Devils River.

Sceloporus floridanus Baird

TEXAS: One; Tom Green, 1, April 29.

Sceloporus poinsettii Baird and Girard

TEXAS: Three; Jeff Davis, 1, May 5; Pecos, 1, April 24; Sutton, 1, April 19.

The specimen from Jeff Davis Co. (Jewett) was taken from the gut of a *Crotalus lepidus lepidus*. The one from Sutton Co. was found beneath a rock in typical *Crotaphytus* habitat.

Sceloporus undulatus consobrinus (Baird and Girard)

TEXAS: Seventeen; Brewster, 1, April 17; Dickens, 1, Oct. 13; Donley, 2, Oct. 3; Ector, 2, May 5; Hall, 8, Oct. 7, 8; Pecos, 1, April 24; Roberts, 1, Sept. 24; Tom Green, 1, April 28.

OKLAHOMA: Two; Beaver, 2, Aug. 31, Sept. 1.

Individuals taken on April 17, Brewster Co., had 8 eggs; April 24, Pecos Co., 9 eggs; April 28, Tom Green Co., 13 eggs; and on May 5, Ector Co., Texas, 13 eggs. The specimen from Tom Green Co. was removed from the gut of a *Coluber flagellum testaceus*. Those taken by me (15) were almost invariably on fence posts.

Sceloporus undulatus garmani (Boulenger)

KANSAS: Two; Meade, 2, May 21.

NEBRASKA: Four; Lincoln, 1, July 24; McPherson, 3, July 24.

The two from Meade Co., Kans., were taken beneath a dry yucca plant. The male was mounted on the back of the female, although actual copulation was not noted. It was cold and the pair were very inactive.

Phrynosoma cornutum (Harlan)

TEXAS: Twenty-six; Brewster, 4, April 17, 25, 26; Ector, 2, May 5; Howard, 1, May 8; Pecos, 14, April 24; Presidio, 2, April 1, 16; Tom Green, 1, April 27; Val Verde, 2, March 29, April 8.

OKLAHOMA: Two; Beaver, 2, Aug. 30, Sept. 6.

Seven young specimens of the following body lengths were taken: 30 millimeters on April 17, Brewster Co.; 31, 32, 33, and 34 mm. on April 24, Pecos Co., Texas; and 24 mm. on Aug. 30 and Sept. 6, Beaver Co., Okla. The first five probably represent young of the previous year (1941) and the last two are probably the young of 1942, if only one brood per year is produced.

Phrynosoma orbiculare hernandesi (Girard)

TEXAS: One; Jeff Davis, 1, May 3.

Phrynosoma modestum Girard

TEXAS: Eight; Brewster, 3, April 17; Pecos, 2, April 24; Presidio, 3, April 3, 20, 22.

The specimens from Presidio Co. (Jewett) were taken in sandy flats and on rocky hillsides.

Teiidae

Cnemidophorus perplexus Baird and Girard

TEXAS: Three; Pecos, 2, May 3; Presidio, 1, May 8.

Cnemidophorus gularis Baird and Girard

TEXAS: Nineteen; Armstrong, 1, Sept. 30; Donley, 1, Oct. 1; Ector, 4, May 5; Howard, 6, May 5, 8; Pecos, 1, May 3; Sutton, 4, April 20, 24; Tom Green, 1, April 29; Val Verde, 1, April 10.

It was noted, in Sutton Co. particularly, that these lizards were generally found in flat grassy places, but occasionally were taken along rocky ledges and under rocks in conjunction with *Crotaphytus*. The latter, however, was never found away from the rocks and in typical *Cnemidophorus* habitat.

Cnemidophorus sexlineatus (Linnaeus)

TEXAS: Two; Ector, 1, May 5; Hemphill, 1, Sept. 22.

KANSAS: Twenty-three; Ellis, 1, Aug. 5; Ford, 9, May 29, 31, June 4; Graham, 1, June 11; Gray, 3, June 3, 4; Meade, 4, May 16, 18; Norton, 2, June 19, July 28; Sheridan, 1, Aug. 10; Trego, 2, Aug. 13.

Individuals taken on June 3 and 4, Gray Co., Kans., had 3 and 5 eggs. Seven young of the following body lengths were taken: 39 millimeters, May 18, Meade Co., tail slightly blue; 36 and 43 mm., May 31, Ford Co., tails with adult coloration; 32 mm., Aug. 5, Ellis Co., tail blue; 2 specimens 31 mm., Aug. 13, Trego Co., Kans., tails blue; and 28 mm., Sept. 22, Hemphill Co., Texas, tail blue. The first three are probably young of the previous year (1941), while the latter four represent young of 1942.

Cnemidophorus tessellatus tessellatus (Say)

TEXAS: Three; Armstrong, 2, Sept. 30; Presidio, 1, April 15.

The two from Armstrong Co. were taken in a sandy wash in Palo Duro Canyon.

Scincidae

Eumeces brevilineatus Cope

TEXAS: Five; Sutton, 5, April 16, 19.

All were taken in the daytime in fallen oak leaves under the oak thickets that grow along the limestone ledges in this region.

Eumeces obsoletus (Baird and Girard)

TEXAS: One; Ector, 1, May 6.

OKLAHOMA: One; Beaver, 1, Aug. 31.

KANSAS: One; Grant, 1, Aug. 29.

The specimen from Beaver Co., Okla., a second year juvenile, was taken from a woodrat (*Neotoma micropus*) "house." The two adults, Ector Co., Texas, and Grant Co., Kans., (Herald) were taken in rat traps baited with rolled oats. Judging from their position in the trap they were interested in the bait or in insects on the bait.

Colubridae

Heterodon contortrix contortrix (Linnaeus)

TEXAS: One; Hall, 1, Oct. 9.

This specimen, SNHM 10392, taken DOR one mile west of Brice, probably approaches the southwestern limit of its range. Ortenburger and Freeman (1930: 182) record it in Oklahoma from "Texas County, 8 miles southeast of Guymon," and Smith and Leonard (1934: 193) from "Harper County, [Okla.] Cimarron River, S of Englewood, Kansas."

Heterodon nasicus nasicus Baird and Girard

TEXAS: Two; Hall, 1, Oct. 9; Martin, 1, May 7.

OKLAHOMA: Two; Beaver, 2, Sept. 2, 9.

KANSAS: Twenty-four; Decatur, 1, June 24; Finney, 2, May 30; Ford, 8, May 27, 28, 29; June 2, 3; Gray, 2, June 4; Hodgeman, 2, June 5; Logan, 2, June 10; Phillips, 1, June 24; Sherman, 1, June 18; Thomas, 1, June 9; Trego, 2, Aug. 3, 14; Wallace, 2, June 11, 18.

COLORADO: Two; Prowers, 1, June 6; Yuma, 1, July 27.

NEBRASKA: Six; Deuel, 2, July 20; Lincoln, 3, July 24; McPherson, 1, July 24.

Eggs were found in May and June in nine individuals. In these, and other snakes, there often occurred numerous small eggs very distinct in size from the larger eggs and distributed in the ovaries with these larger eggs that were obviously to produce young shortly. Either these small eggs had started to develop and for some unknown reason were being resorbed, or they represent a group of eggs that would mature the following year or later in the same year. In all egg counts the small eggs have been omitted. Kansas specimens from Ford Co. taken on May 27 had 14 eggs; on May 29, 23 eggs; on May 29, 11 eggs; on June 2, 17 eggs; on June 3, 7 eggs; from Gray Co. on June 4, 13 eggs; from Logan Co. on June 10, 7 eggs; and from Sherman Co. on June 18, 13 eggs. In a specimen from Ford Co., June 2, a *Bufo* sp. was noted in the gut. Unidentifiable insect remains were noted in others.

Coluber constrictor flaviventris (Say)

TEXAS: Three; Hemphill, 3, Sept. 14, 17, 22.

KANSAS: Ten; Decatur, 1, June 25; Ford, 1, May 26; Meade, 2, May 21; Ness, 2, Aug. 21, 25; Trego, 1, Aug. 13; Wallace, 3, June 9, 17.

NEBRASKA: Two; Red Willow, 2, July 1, 3.

These snakes were generally taken in meadows or grassland. Eggs were found in Kansas specimens as follows: Meade Co., June 21, 17 eggs; Wallace Co., June 9, 8 eggs; Wallace Co., June 17, 5 eggs. The eggs of the latter were somewhat posterior in the oviduct and the shells were well developed; possibly some eggs had already been deposited. Juveniles of the year were taken in Hemphill Co., Texas, on Sept. 17 and 22. One from Meade Co., May 21, had a *Reithrodontomys albescens* in its gut.

Coluber flagellum testaceus Say

TEXAS: Thirteen; Brewster, 3, April 28, 29; Hemphill, 1, Sept. 23; Motley, 1, Oct. 21; Pecos, 4, April 24, May 1; Sutton, 1, April 16; Tom Green 1, April 25; Val Verde, 2, April 2.

OKLAHOMA: Two; Beaver, 2, Sept. 6, 7.

KANSAS: Seven; Ford, 2, May 26; Kearney, 1, June 4; Meade, 1, May 13; Morton, 1, May 22; Trego, 1, Aug. 15; Wallace, 1, June 17.

This snake was not observed north of Trego Co., Kans. An individual from Morton Co., Kans., May 22, had 11 eggs and one from Wallace Co., Kans., June 6, had four eggs. A specimen from Sutton Co., Texas, April 16, disgorged a *Sceloporus* sp. and two *Sceloporus* eggs; nine additional eggs were found in the snake's gut. A *Sceloporus undulatus consobrinus* was found in the gut of one from Tom Green Co., Texas, April 28. The remains of at least two *Cnemidophorus* sp. were noted in one from Trego Co., Kans., Aug. 15. Two large grasshoppers, a large caterpillar, and a small *Holbrookia m. maculata* were found in a specimen from Beaver Co., Okla., Sept. 7.

Coluber taeniatus schotti (Baird and Girard)

TEXAS: Two; Val Verde, 2, April 2, 10.

One, SNHM 9856, was found DOR on April 2, just west of Sacatosa Creek on Texas Hwy. 85. The other, SNHM 9864, was taken on April 10, crossing U. S. Hwy. 90, 8.5 miles northwest of Del Rio. Both agree closely with Gloyd and Conant's description of *schotti* (1934). From their distributional records SNHM 9864 might be expected to be a *schotti-girardi* intergrade, but such tendencies were not noted. At least two other *schotti* were observed in this vicinity, but their extreme rapidity, terrestrially and arboreally, prevented their capture.

Elaphe laeta laeta (Baird and Girard)

TEXAS: One; Donley, 1, Oct. 2.

This specimen agrees well with Woodbury and Woodbury's (1942) diagnosis of the subspecies. It was taken in the bottom of a ditch filled with blown tumbleweeds. Two very young cotton rats (*Sigmodon hispidus*) were removed from its gut and a nearby nest was found to contain twelve more rats of similar size. The loud "squeaking" of the rats led to the removal of the tumbleweeds and the discovery of the snake.

Elaphe sclerotica Smith

TEXAS: One; Val Verde, 1, April 6.

This snake, SNHM 9855, was found DOR just east of the Devils River Canyon and just south of U. S. Hwy. 90. This locality apparently constitutes a range extension of slightly less than 200 miles east of the Davis Mtn. region (Jeff Davies Co., Texas).

Arizona elegans elegans Kennicott

TEXAS: One; Howard, 1, May 5.

OKLAHOMA: One; Beaver, 1, Sept. 10.

KANSAS: Three; Cheyenne, 1, July 7; Ford, 2, May 27, 28.

All were found DOR except SNHM 10393, collected by John W. Anderson, Cheyenne Co., Kans., thirteen miles southeast of Benkelman, Nebr. This specimen was attempting to eat a trapped (dead) kangaroo rat (*Dipodomys ordii*). This locality extends the known range of this snake some 150 miles to the north. It probably will be found in Nebraska. Previous records in Kansas are from Clark, Morton, and Stafford Co.'s (Taylor, 1929a and b), and Reno Co. (Burt, 1933 and 1935).

Pituophis sayi sayi (Schlegel)

TEXAS: Six; Hemphill, 1, Sept. 24; Howard, 1, May 4; Moore, 1, May 10; Motley, 1, Oct. 12; Pecos, 1, April 29; Sherman, 1, May 10.

KANSAS: Ten; Cheyenne, 1, July 7; Ford, 3, May 26, 29, June 3; Hamilton, 1, May 29; Meade, 2, May 16, 20; Morton, 2, May 15, 22; Norton, 1, June 20.

NEBRASKA: Two; Hitchcock, 1, July 6; Red Willow, 1, July 8.

One specimen was taken in Ford Co., June 3, with 11 eggs. One from Meade Co., May 16, had two young doves (*Zenaidura macroura*) in its gut. One from Norton Co., Kans., June 20, disgorged a white-footed mouse (*Peromyscus maniculatus*). One from Hitchcock Co., Nebr., July 6, had what appeared to be a grasshopper mouse (*Onychomys leucogaster*) and many nematodes in its gut.

Lampropeltis getulus splendida (Baird and Girard)

NEW MEXICO: One; Torrance, 1, May 9.

TEXAS: One; Hemphill, 1, Sept. 23.

SNHM 9833 collected by Stanley G. Jewett Jr., 48 miles south of Vaughn, Torrance Co., New Mexico, was taken somewhat north of the known range of this snake. Blanchard (1921: 28) gives Dona Ana Co. as the northernmost record in New Mexico, but adds that "... it doubtless extends considerably north of Fort Fillmore.... [Dona Ana Co.]" Schmidt and Davis (1941: 178) record it from "... southern New Mexico...."

Lampropeltis triangulum gentilis (Baird and Girard)

KANSAS: One; Ford, 1, May 30.

This specimen, SNHM 9914, was taken at night nine miles east of Dodge City, in a rat trap set near a brushy rock ledge. It is a large individual, measuring $28\frac{7}{8}$ inches in total length (fresh), and contained twelve eggs about 14×24 millimeters (fresh).

Rhinocheilus lecontei tessellatus Garman

TEXAS: Two; Coke, 1, April 30; Pecos, 1, April 21.

The specimen from Coke Co. was found DOR.

Natrix erythrogaster transversa (Hallowell)

TEXAS: Four; Pecos, 3, April 19, 29, May 5; Tom Green, 1, May 28.

KANSAS: Two; Ford, 2, May 28.

Individuals from Tom Green Co., Texas, and Ford Co., Kans., were all taken in streams. A catfish, almost completely digested, was found in the gut of one from Pecos Co., Texas.

Natrix grahamii (Baird and Girard)

TEXAS: One; Hemphill, 1, Sept. 9.

This snake, SNHM 10394, was found DOR near a small "swamp" just north of the Canadian River and 5 miles west of Canadian. This locality is about 125 miles from Comanche Co., Okla., which is apparently the nearest previously recorded locality (Smith and Leonard, 1934: 194).

Natrix harteri Trapido

TEXAS: Two; Tom Green, 2, April 29.

These specimens, SNHM 9896-7, were taken near the South Fork of the Concho River near Christoval. *N. harteri* was previously known only from the types collected along the Brazos River, north of Palo Pinto, Palo Pinto Co., Texas. This new locality is some 165 miles to the southwest and is in the Colorado River watershed. Comparison of these specimens with the types is given in Table 1.

TABLE 1.—Comparison of *Natrix harteri* from the South Fork of the Concho River with the type specimens (data from Trapido, 1941) from the Brazos River.

| | SNHM 9897 ♀ | SNHM 9896 ♂ | 23 types (Trapido) |
|----------------------------|----------------|----------------|---------------------------------------|
| total length | 467 mm. | 273 mm. | 228.6 - 812.8 mm. |
| tail length | 114 mm. | 74 mm. | |
| tail length / total length | 24.4% | 27.1% | {25.7% - 27.6% ♂, {22.0% - 25.8% ♀ |
| scale rows: neck | 23 | 21 | 21 - 26 |
| scale rows: mid-body | 22 | 23 | 20 - 23 |
| scale rows: anus | 17 | 17 | 16 - 17 |
| upper labials; L, R | 8, 8 | 9, 8 | 8 - 7, 8 |
| lower labials; L, R | 10, 10 | 10, 10 | 9 - 11 |
| postoculars; L, R | 3, 3 | 3, 3 | 2 - 3, 2 - 3 |
| ventrals | 143 | 142 | {145 - 149 ♂, {146 - 150 ♀ |
| subcaudals | 70 | 82 | {81 - 85 ♂, {71 - 75 ♀ |
| posterior temporals; L, R | 1, 1 | 1, 1 | 1 - 5, 1 - 4 |
| dorsal body spots | 56 | 55 | 58 - 65 |

It can be seen that the Concho River specimens agree with those from the Brazos River, with slight variations. The dorsal body spots, ventrals, and subcaudals are all somewhat fewer than the minimum given for the types. The dorsal coloration and pattern are the same. The venter is largely the same, but no pink was observed (in alcohol). The dark pigment on the anterior 1/3-1/2 of the caudals is evidently more pronounced in the Concho River individuals.

The ecological distinctions between *N. harteri* and *N. e. transversa* made by Trapido (1941) were observed here. The two *harteri* were coiled under one rock on a small (eight square feet) "island." One *transversa* was taken within fifty feet of this island in a small pool left as a bypass from the main stream by receding waters.

Thamnophis eques eques (Reuss)

TEXAS: One; Sutton, 1, April 15.

This snake was found in a dry area beneath a rock along a limestone ledge. The remnants of a small toad (*Bufo* sp.) were found in its gut.

Thamnophis marcianus (Baird and Girard)

TEXAS: Eight; Brewster, 2, April 26, 29; Donley, 1, Sept. 29; Pecos, 1, April 25; Presidio, 1, April 22; Schleicher, 1, April 17; Sutton, 1, April 24; Tom Green, 1, April 30.

KANSAS: Two; Sheridan, 1, Aug. 10; Trego, 1, Aug. 8.

The specimen from Pecos Co., April 25, had 12 eggs. One *Pseudacris (nigrita clarkei?)* was noted in the gut of the snake from Schleicher Co., Texas.

Thamnophis radix (Baird and Girard)

OKLAHOMA: One; Beaver, 1, Sept. 11.

KANSAS: Twelve; Ford, 2, May 27, 28; Hamilton, 1, June 3; Meade, 2, May 16, 20; Rooks, 2, June 11; Sheridan, 1, June 17; Sherman, 1, June 18; Wallace, 3, June 9.

NEBRASKA: Four; Lincoln, 3, July 13, 20, 22; Perkins, 1, July 22.

Eggs were noted as follows: Ford Co., May 28, 17 eggs; Hamilton Co., June 3, 18 eggs; Wallace Co., June 9, 13 eggs; Rooks Co., June 11, 25 eggs; Sheridan Co., Kans., June 17, 37 eggs with the embryos visible; and Perkins Co., Nebr., July 22, 27 embryos 11 to 12 centimeters in total length. A juvenile $9\frac{1}{4}$ inches in total length (fresh) was taken in Wallace Co. on June 9. One was seen eating a dead (trapped) house mouse (*Mus musculus*) and another that was taken from a live bait tank disgorged two small fishes. One was taken in a small pond.

Thamnophis sauritus proximus (Say)

TEXAS: Seven; Pecos, 7, April 19.

KANSAS: Five; Scott, 1, Aug. 20; Sheridan, 4, Aug. 10.

The specimens from Pecos Co., Texas, April 19, measured 318, 327, 346, 356, 357, 366 and 560 millimeters in total length. The first six are probably the young of 1941, while the last one is probably from the 1940, or earlier, broods. One individual from Scott Co., Aug. 20, measured 516 millimeters and those from Sheridan Co., Kans., Aug. 10, measured 516, 226, 243, and 285 millimeters. The last three are of the 1942 brood, while the larger ones from Scott and Sheridan Co.'s. are probably of the 1941, or earlier, broods.

Thamnophis sirtalis parietalis (Say)

TEXAS: One; Hemphill, 1, Sept. 22.

NEBRASKA: Two; Lincoln, 1, July 23; Logan, 1, July 17.

The specimen from Lincoln Co., Nebr., had a grasshopper in its gut.

Hypsiglena ochrorhyncha Cope

NEW MEXICO: One; Taos, 1, May 9.

This snake, SNHM 9834, taken DOR by Stanley G. Jewett, Jr., 2 miles north of Taos, Taos Co., constitutes the second record for New Mexico. Koster (1940) reports it from "... five miles southwest of Los Lunas in Valencia County..." This new locality is some 140 miles to the northeast.

*Boigidae**Tantilla gracilis* Baird and Girard

TEXAS: Two; Sutton, 2, April 13.

These two snakes were taken within a few yards of each other under limestone rocks in a moist situation in a small valley.

*Crotalidae**Crotalus atrox* (Baird and Girard)

TEXAS: Seven; Armstrong, 1, Sept. 30; Brewster, 2, April 28, 29; Cottle, 1, Oct. 16; Howard, 1, May 4; Motley, 1, Oct. 14; Pecos, 1, April 24.

The specimen from Pecos Co., April 24, contained 24 eggs and the one from Howard Co., May 4, had 16 eggs. Two young cottontail rabbits (*Sylvilagus auduboni*) were found in the gut of one; a white-footed mouse (*Peromyscus maniculatus* or *leucopus*) in another; and a tapeworm and unidentifiable mammalian remains in a third. Gloyd (1940) and others do not record this snake from the Texas Panhandle and it apparently is absent from the plains. SNHM 10396, taken in Palo Duro Canyon, 18 miles south of Claude, Armstrong Co., Texas, on Sept. 30, was well into the Panhandle, although definitely not on the plains.

Crotalus lepidus lepidus (Kennicott)

TEXAS: One; Jeff Davis, 1, May 5.

This specimen was collected by Jewett and was not preserved. Two lizards were taken from its gut. One, *Sceloporus poinsettii*, was saved.

Crotalus viridis viridis Rafinesque

TEXAS: One; Roberts, 1, Sept. 23.

OKLAHOMA: One; Beaver, 1, Sept. 2.

KANSAS: Seven; Hamilton, 2, June 2; Logan, 1, June 11; Meade, 1, May 16; Ness, 2, Aug. 24, 27; Thomas, 1, Aug. 12.

A specimen from Hamilton Co., June 2, had 14 eggs and one from Thomas Co., Kans., Aug. 12, contained 14 embryos measuring from 175 to 195 millimeters in total length. One taken in a rat trap in Ness Co., Kans., Aug. 27, had an adult *Microtus haydeni* in its gut.

*Kinosternidae**Kinosternon flavescens* (Agassiz)

TEXAS: Five; Brewster, 1, April 1; Howard, 1, May 9; Motley, 1, Oct. 15; Pecos, 1, April 20; Val Verde, 1, April 10.

OKLAHOMA: One; Beaver, 1, Sept. 5.

KANSAS: Eight; Hamilton, 8, May 31.

These turtles were exceedingly common in mud pools along the Arkansas River, from which those from Kansas were seined. Those from Motley and Val Verde Co.'s, Texas, were taken while crossing roads, in both instances apparently far removed from water.

*Chelydridae**Chelydra serpentina serpentina* (Linnaeus)

TEXAS: One; Pecos, 1, May 1.

NEBRASKA: One; Lincoln, 1, July 25.

The specimen from Nebraska was taken while crossing the road. Their tracks were very commonly observed in recently dried water courses.

*Testudinidae**Terrepenne ornata* (Agassiz)

TEXAS: Ten; Armstrong, 1, Sept. 30; Dickens, 2, Oct. 13; Donley, 2, Sept. 29, Oct. 3; Hemphill, 1, Sept. 15; Howard, 1, May 8; Sherman, 1, May 10; Sutton, 1, April 24; Tom Green, 1, April 29.

OKLAHOMA: Four; Beaver, 1, Sept. 1; Harper, 3, May 16.

KANSAS: Thirty-five; Finney, 2, May 26, 30; Ford, 10, May 27, 28, 29, 31; Hamilton, 12, May 24; Lane, 1, Aug. 25; Morton, 8, May 12, 22; Trego, 2, Aug. 4.

COLORADO: Two; Prowers, 1, June 6; Yuma, 1, June 3.

NEBRASKA: Two; Hitchcock, 1, July 6; Red Willow, 1, July 2.

This box turtle was common where encountered, particularly in the plains and sand-hill regions. On hot days they were most active early and late in the day and during the middle of the day were often observed in holes only slightly larger than themselves. Twenty-one were taken in rat traps baited with rolled oats and had definitely been eating the bait. They were commonly observed eating trapped rodents and one was seen eating a grasshopper.

Copulation was observed twice. In both instances the turtles were seen only after the union had started and the courtship was therefore not seen. The first pair were seen in Ford Co., Kans., on May 29, by Sibley, who found a male *Terrapene* mounted on a dead female which had been killed by a rat trap. The second pair were seen in Dickens Co., Texas, on October 13, but separated before photographs or prolonged observation could be made. The female was in a normal position and the male was standing erect, its plastron against the carapace of the female. The male was leaning back so that their bodies made an angle somewhat greater than 90 degrees and appeared to be resting on its hind limbs and the posterior part of the carapace.

Since the young have not been adequately described (Pope, 1939: 140) a short description of the five young secured will be included. The localities, dates, length (L), and width (W) in millimeters are as follows: Finney Co., May 26, L 37, W 34; Finney Co., May 30, L 31, W 33, Ford Co., Kans., May 31, L 33, W 34; Prowers Co., Colo., June 6, L 35, W 34; and Red Willow Co., Nebr., July 2, L 30, W 28. As will be noted, the young are almost round and not elongated as are the adults. They appear to be relatively flatter than the adults. A rounded dorsal ridge, not a crest, is present in all five specimens. They are darker than the adults; the dorsal ridge is yellow and there are faint light spots on the carapace, but the adult pattern is not yet distinct. The plastron is light margined with no pattern of light spots present in the dark interior.

Graptemys pseudogeographica versa Stejneger

TEXAS: One; Tom Green, 1, April 28.

This specimen, SNHM 9701, taken in the South Fork of the Concho River near Christoval, represents a northwesterly range extension of some seventy-five miles. Previously it has been known only from the type locality at Austin and from northeastern Edwards Co., as reported by Daugherty (1942). The Concho River, at this new locality, is relatively cold and rapid. Due to its coloration and small size this turtle might easily be overlooked and careful collecting will probably extend its known range considerably.

Chrysemys picta bellii (Gray)

NEBRASKA: Nine; Deuell, 9, July.

SOUTH DAKOTA: One; Campbell, 1, June 10.

Pope (1939: 202) states that "Judging by existing records, however, it [*bellii*] avoids all of Oklahoma. . . ." This turtle was observed rather commonly in Beaver Co., Okla., but unfortunately none were secured.

*Trionychidae**Platypeltis*¹ *emoryi* (Agassiz)

TEXAS: One; Wheeler, 1, Sept. 15.

This turtle is apparently referable to this species, although comparative material was not available. It was compared with *muticus* and it is not that species. It was collected with a shotgun while basking on the bank of a small, mud-bottom stream.

REFERENCES

- BLANCHARD, FRANK N. 1921—A revision of the king snakes: genus *Lampropeltis*. Bull. U. S. Nat. Mus. **114**:260, 78 figs.
- BURT, CHARLES E. 1933—Some distributional and ecological records of Kansas reptiles. Trans. Kans. Acad. Sci. **36**:186-208.
- 1935—Further records of the ecology and distribution of amphibians and reptiles in the Middle West. Amer. Midl. Nat. **16**(3):311-336.
- DAUGHERTY, ANITA E. 1942—A record of *Graptemys pseudogeographica versa*. Copeia **1942**(1):51.
- GLOYD, HOWARD K. 1940—The rattlesnakes, genera *Sistrurus* and *Crotalus*. Chicago Acad., Spec. Publ. **4**: 1-266, 10 figs., 22 maps, 31 pls.
- GLOYD, HOWARD K. AND ROGER CONANT. 1934—The taxonomic status, range, and natural history of Schott's racer. Occ. Pap. Mus. Zool. Univ. Mich. **287**:1-17, 3 pls.
- KOSTER, WILLIAM J. 1940—The first record of the snake, *Hypsiglena*, from New Mexico. Herpetologica **2**(2):30.
- ORTENBURGER, A. I. AND BERYL FREEMAN. 1930—Notes on some reptiles and amphibians from western Oklahoma. Publ. Univ. Okla. **2**: Biol. Survey no. 4: 175-188.
- POPE, CLIFFORD H. 1939—Turtles of the United States and Canada. Alfred A. Knopf, New York. xviii + 343 pp., 99 illus.
- SCHMIDT, KARL PATTERSON AND D. DWIGHT DAVIS. 1941—Field book of snakes of the United States and Canada. G. P. Putnam's Sons, New York. xiii + 365 pp., 103 figs., 34 pls.
- SMITH, HOBART M. 1934—The amphibians of Kansas. Amer. Midl. Nat. **15**(4): 377-528, pls. 12-20.
- 1939—Notes on Mexican Reptiles and Amphibians. Zool. Ser. Field Mus. Nat. Hist. **24**:15-35, 2 figs.
- SMITH, HOBART M. AND ARTHUR B. LEONARD. 1934—Distributional records of reptiles and amphibians in Oklahoma. Amer. Midl. Nat. **15**(2):190-196.
- STEJNEGER, LEONHARD AND THOMAS BARBOUR. 1943—A check list of North American amphibians and reptiles. Fifth Ed. Bull. Mus. Comp. Zool. **93**:xix + 260.
- TAYLOR, EDWARD H. 1929a—A revised checklist of the snakes of Kansas. Univ. Kans. Sci. Bull. **19**(5):53-62.
- 1929b—List of reptiles and batrachians of Morton County, Kansas, reporting species new to the state fauna. Univ. Kans. Sci. Bull. **19**(6):63-65.
- TRAPIDO, HAROLD. 1941—A new species of *Natrix* from Texas. Amer. Midl. Nat. **25**(3):673-680, 5 figs.
- WOODBURY, ANGUS M. AND DIXON M. WOODBURY. 1942—Studies of the rat snake, *Elaphe laete*, with description of a new subspecies. Proc. Biol. Soc. Wash. **55**: 133-142, 2 figs.
- WRIGHT, ANNA ALLEN AND ALBERT HAZEN WRIGHT. 1942—Handbook of frogs and toads. Comstock Publishing Co., Inc., Ithaca. xi + 286 pp., 7 figs., 88 pls.
- NATURAL HISTORY MUSEUM,
STANFORD UNIVERSITY, CALIF.

¹ See Smith, 1939, p. 19, for use of *Platypeltis*.